

REMARKS

In the Office Action mailed December 14, 2006, the Examiner rejected claims 1-38 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,311,129 ("Lin"). Applicant respectfully traverses the rejections and requests reconsideration.

In claim 1, Applicant recites a system processor for a navigation system. The system processor includes a Kalman filter and mode logic. The mode logic is operable to select what data the Kalman filter uses to calculate corrections to a navigation solution. The selection is based on which of a plurality of sensors is providing accurate data. Similarly, in claims 16 and 26, Applicant recites a navigation system and method that includes determining which of a plurality of sensors is providing accurate data, selecting data from sensors providing accurate data, and calculating corrections to a navigation solution based on the selected data. As a result, the system automatically selects the Kalman filter aiding source so that the pilot may operate an aircraft using the best data available from the avionic sensors.

Lin does not describe selecting data from sensors providing accurate data to calculate corrections to a navigation solution. Instead, Lin describes providing all sensor data (accurate or not) to the Kalman filter. "All raw measurements processed by data fusion and failure detection and isolation techniques are sent into the multi-mode integration Kalman filter." (Lin, col. 16, lines 48-51.) In the case of sensor failure, Lin's Kalman filter reconfigures a navigation algorithm.

If the dynamics change drastically, or if a sensor failure occurs, for example, a GPS satellite signal failure or an inertial sensor signal failure, the filter must detect, rectify and isolate the failure situation, and finally reconfigure the integrated navigation algorithm by use of some mechanism.

(Lin, col. 16, lines 3-8.) At most, Lin describes mode logic that selects operation modes. (See, e.g., Lin, col. 17, lines 19-31.)

Because Lin handles sensor failure by reconfiguring the navigation algorithm, Lin does not suggest handling sensor failure as claimed. Accordingly, Applicant submits that Lin does not anticipate claims 1, 16, and 26. Claims 2-15 depend from claim 1. Claims 17-25 depend from claim 16. Claims 27-38 depend from claim 26. Accordingly, Applicant also submits that Lin does not anticipate claims 2-15, 17-25, and 27-38 for at least the reasons described above with reference to claims 1, 16, and 26.


In light of the above, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102(b).

CONCLUSION

In light of the above remarks, Applicant submits that the present application is in condition for allowance and respectfully requests notice to this effect. The Examiner is requested to contact Applicant's representative below if any questions arise or she may be of assistance to the Examiner.

Respectfully submitted,

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